SURVEY OF SELECTED RETAIL FOOD STORES HANDLING FISH IN CUYAHOGA AND SUMMIT COUNTIES, OHIO

Leonard J. Konopa

INSTITUTE FOR 21st CENTURY BUSINESS

CENTER FOR BUSINESS AND ECONOMIC RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
KENT STATE UNIVERSITY KENT, OHIO 44242

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FOREWORD

Research is being conducted under a Sea Grant Program at Kent State University* to examine the marketing and physical distribution of fish and fish products into the Midwest. This study reports the results of a survey made of randomly selected retail food stores in Cuyahoga and Summit Counties, Ohio, and is the first of a series of reports dealing with members of the distribution channel.

Throughout the entire research project emphasis is on the marketing of fresh fish, but it is necessary to obtain information in regard to frozen and even canned fish, since their marketing has a direct impact on the marketing and physical distribution of fresh fish.

Assisting Leonard J. Konopa, co-principal investigator on this particular study were: J. Stephen Kelly, Charles W. Lamb, Jr., Suzanne E. Thom, and Daniel F. Twomey. These doctoral students interviewed retailers and observed their practices in regard to the display and selling of fish in their outlets.

This report should prove useful to members of the fisheries industry, students of marketing, and retailers, since it is one of the few studies dealing with this member of the distribution channel.

Donald F. Mulvihill
Co-Principal Investigator

* NOAA 2-35364, Application of Computer Technology and Advanced Physical Distribution Techniques to Seafood Marketing.

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I. NATURE OF THE SURVEY

In the Fall of 1970, Kent State University received a grant from the National Science Foundation to analyze (a) the market for fish in the Midwest, and (b) the channels of distribution for fresh fish. An exploratory survey among retailers and wholesalers in a two-county area was conducted from April through August, 1971, as the initial undertaking of this project. The retail survey data are summarized in this paper.

II. RETAIL SURVEY METHODOLOGY

All of the general line and specialty line retail grocery establishments listed in the yellow pages of the Akron and Vicinity Telephone Directory (Summit County, Ohio) and the Cleveland Metropolitan Area Telephone Directory (Cuyahoga County, Ohio) were contacted by telephone to determine whether or not they sold fish; and, if so, the form of fish (fresh, frozen or canned) they handled. A random sample of nonchain retailers was then selected from the list of retailers who carried fish. Chain store retail outlets (centrally owned and centrally directed units) were selected similarly, but fewer establishments were chosen because the retail outlets of a given chain ordinarily operate in the same manner. This contention was supported subsequently, when the replies of store managers in the same centrally owned and controlled chains were compared. There were only minor differences among them as to their policies, attitudes and methods of operation.

Interviewers arranged appointments by telephone with the randomly selected retailers to conduct personal interviews at the convenience of the store managers. When a store manager was unable to keep his appointment, a follow-up interview was conducted by telephone. A structured questionnaire was utilized in all interviews. The questionnaire was pretested extensively during the

Winter Quarter, 1971.

Overall, 115 retailers were selected in the random sample. Usable replies were received from 110 managers. After the replies were edited, they were tabulated by means of a Cobal program written for this purpose.

III. DESCRIPTION AND CLASSIFICATION OF THE STORES

(a) General Line Food Stores and Specialty Fish or Meat Markets

Retailers handling fish are divided into two major categories in Table 1. Category A contains the general line grocery stores offering fish; Category B represents the specialty fish or meat markets handling fish. The fish markets, of course, specialize in the sale of fish, while the meat markets sell fish either as a major food item or carry it to accommodate customers who desire fish.

(b) Grouping by Annual Sales as Well as Form of Ownership and Operation

The retailers are further grouped in Table 1 by annual sales as well as by form of store ownership and operation. Classification of stores by annual sales is self-evident. The ownership and operating characterstics by which various types of stores are differentiated, however, requires explanation. Independent stores are individually owned and operated by their proprietors. They are not members of any wholesaling group or comparable association. Affiliated stores are also independently owned and operated, but they are members of retailer or

wholesaler sponsored voluntary groups. The Betsy Ross Wholesale Grocery Company, for example, is owned by the independent retailers who join the voluntary cooperative association. Proprietors of Eagle, Square Deal, and Stop-N-Shop establishments are members of wholesaler sponsored voluntary chains. Such groups perform the wholesaling function for their members and typically provide marketing services which may range from advertising in local newspapers to the prepricing of products. Chain stores, as indicated heretofore, are centrally owned and operated by their managers in keeping with corporate policies and procedures.

(c) Analysis of Type of Retail Stores.

A review of Table 1 shows all of the specialty fish or meat markets in the sample are independent stores while 48 of the 98 general line food stores are also independent establishments. The grouping by annual sales further indicates the independent stores are typically smaller establishments. Affiliated stores, on the other hand, are generally larger than the independents. As a matter of fact, seven of the 33 affiliated stores report sales of $1,000,000 or more per annum. Lastly, the large size of the 17 chain stores is evinced by the fact none has annual

sales under $1,000,000.

TABLE 1

TYPE OF STORES GROUPED BY ANNUAL SALES

TYPE OF STORE	ANNUAL SALES GROUPS Group 1 Sales to $99,999	Group 2 $100,000 to $499,999	Group 3 $500,000 to $999,999	Group 4 $1,000,000 and over	Total
A. General Line Food Stores					
Independent Stores	24	12	11	1	48
Affiliated Stores	5	14	7	7	33
Chain Stores	0	0	0	17	17
Subtotal	29	26	18	25	98
B. Specialty Fish or Meat Markets					
Independent Stores	8	4	0	0	12
Affiliated Stores	0	0	0	0	0
Chain Stores	0	0	0	0	0
Subtotal	8	4	0	0	12
GRAND TOTAL	37	30	18	25	110

Source: Survey Results

IV. FORM OF FISH HANDLED BY SIZE OF STORE

(a) Definitions of Form of Fish Handled

Table 2 depicts the forms of fish handled by size of store according to annual sales for the general line food stores and specialty fish or meat markets. Since this is the first time the respective headings appear concerning forms of fish, these terms shall be defined to clarify them. Fin fish constitute such forms of fish as haddock, cod, flounder, red snapper or perch. Shell fish include such varieties as shrimp, clams, oysters, lobsters, or scallops. Fresh fin and shell fish are fish that have not been frozen. Whole fin and shell fish are sold as caught, that is, without any processing. Processed fin fish, on the other hand, have been headed and cleaned, while processed shell fish have been removed from their shell or deveined. Prepared fin fish and shell fish are bought ready to cook or heat in the form of fish sticks, breaded fillets, or breaded shrimp. Canned fish refers to all types of fin and shell fish sold in canned form rather than fresh or frozen form. Canned tuna, salmon, sardines, mackeral, oysters, or marinated herring in jars are examples of canned fish.

(b) Form of Fish Handled by General Line Grocers

The data contained in Table 2 show canned fish is carried by 98 per cent of the general line grocery retailers. The second most popular product is prepared frozen fin and shell fish with nearly 80% of the general line grocery stores offering prepared frozen fin and approximately 70% stocking prepared frozen shell fish. The general line grocers' preference for frozen fish is further reflected by the fact 57% handled whole or processed frozen fin while 47% sold whole or processed frozen shell fish. Whole or processed fresh fin is found in 34% of the general line food stores. Whole or processed fresh shell fish is a scarcer commodity handled by 13% of the establishments. Similarly, only five per cent offered prepared fresh fin fish while one store (1%) handled prepared fresh shell fish.

(c) Forms of Fish Handled by Specialty Markets.

Among the specialty fish or meat markets, whole or processed fresh fin is the most popular item with 83% (10 of 12 stores) handling fresh fin fish. Only 33%, however, also stock whole or processed fresh shell fish. Interestingly, none of the specialty stores sell prepared fresh fin or shell fish, although

prepared frozen fin is found in 42% of the specialty stores and prepared frozen shell fish in 17%. Whole or processed frozen shell fish are handled by more specialty markets than whole or processed frozen fin fish (25% versus 17%). Finally, only 17% stocked canned fish.

(d) Recapitulation

In summary, canned fish is the most widely handled variety of fish. The general line grocers, moreover, are more likely to stock various forms of frozen fish than fresh fish. Fresh fish, of course, is the primary product of the specialty fish or meat markets. Even so, several of the meat markets distribute frozen rather than fresh fish.

TABLE 2

FORMS OF FISH HANDLED BY SIZE AND TYPE OF STORE

Type of Store and Size	Form of Fish Handled								
	Whole or Processed				Prepared				
	Fresh		Frozen		Fresh		Frozen		
	Fin	Shell	Fin	Shell	Fin	Shell	Fin	Shell	Canned
A. General Line									
1. Sales under $99,999 [29]	0	0	7	3	0	0	14	7	28
2. $100,000 to $499,999 [26]	4	1	14	12	0	0	26	22	26
3. $500,000 to $999,999 [18]	9	4	12	9	1	0	14	15	17
4. $1,000,000 & over [25]	19	8	24	22	4	1	25	23	25
Subtotal	32	13	57	46	5	1	79	67	96
B. Specialty Line									
1. Sales under $99,999 [8]	8	4	0	1	0	0	2	1	1
2. $100,000 to $499,999 [4]	2	0	2	2	0	0	3	1	1
Subtotal	10	4	2	3	0	0	5	2	2
GRAND TOTAL	43	17	58	47	5	1	84	69	98

Source: Survey Results.

V. PERCENTAGE OF STORE'S SALES BY FORM OF FISH HANDLED

(a) General Line

The proportion of each store's sales derived from each type of fish carried is presented in Table 3. When more than one store offered the same product mix, such stores were combined as subgroups. A particular product's percentage of sales in Table 3 represents the range from the lowest to highest percentages among the stores in the subgroup.

(a1) Group 1.

The reader will note that none of the small grocery retailers with sales under $100,000 handled any form of fresh fish. All but one of these 29 stores, however, sold canned fish. Overall, canned fish accounted for 39 to 100% of the respective store's total fish sales with the exception of the store not handling canned fish. As a matter of fact, canned fish was the only form of fish carried by 40% of the retailers in this sales group. The other 60% who carried frozen fish were twice as likely to carry prepared frozen fin or shell in contrast with

whole or processed frozen fish.

(a2) Group 2.

Every general line grocery store in sales group 2 ($100,000 - $499,999) stocked canned fish along with some type of prepared frozen fin and/or shell fish. Canned fish accounted for 28 to 76% of total fish sales per outlet. Prepared frozen fish ranged from a low of 4% to a maximum of 64% of a store's fish sales. Similar to retailers in sales group 1, the retailers in sales group 2 handling frozen fish were nearly twice as likely to handle prepared frozen fish rather than whole or processed frozen fish. Five of the 26 stores carried whole or processed fin in addition to frozen and canned fish. Fresh fin fish sales ranged from 7 to 27% of a store's total fish sales. One establishment in this group also carried fresh shell fish.

(a3) Group 3.

Turning to general line retail grocers in sales group 3

($500,000-$999,999), we find 17 of the 18 stocked canned fish for 16 to 83% of their fish sales. Sixteen of the 18 stores also carried prepared frozen fin and shell fish in addition to canned fish. Prepared frozen fish sales ranged from 1 to 42% of total sales. Unlike the stores in groups 1 and 2, the retailers in sales group 3 were more inclined to handle whole or processed frozen fish along with prepared frozen fish. The maximum sales of whole or processed frozen fish, however, was 27% in contrast with 42% for prepared frozen fish. The emergence of fresh fish in the product mix is demonstrated by the fact 9 of the 18 stores in group 3 (50%) sold fresh fish, whereas only 19% did so in group 2 and none stocked fresh fish in group 1. The sales of whole or processed fresh fin fish ranged from 7 to 69% and from 9 to 23% for shell fish. One retail outlet in group 3, however, stocked no other form of fish but fin fish.

(a4) Group 4.

The product mix of the largest general line grocery retailers ($1,000,000 and over annual sales) shows all 25 supermarkets in group 4 carried canned fish plus prepared frozen fin and/or shell fish as well as whole or processed frozen fin and/or shell fish. Canned fish sales accounted for 20 to 75% of the respective store's sales; prepared frozen fish represented 2 to 38%, while whole or processed frozen fish sales ranged from 1 to 58%. For the first time, we have a category in which every retailer stocked whole or processed frozen fish along with prepared frozen fish and canned fish. Whole or processed fresh fish, moreover, was found in 76% of the stores in group 4. Four of these establishments also handled prepared fresh fin or shell fish.

(a5) General Line Summary.

Before we examine the data concerning specialty line markets in Table 3, we shall review the trends

discerned for general line retail grocers. First, it is evident once more that canned fish is the predominant form of fish carried by general line grocers. Only two firms failed to stock the item. Among the 96 firms handling it, with the exception of 7 retailers, sales of canned fish represented 30 to 100% of their particular store's fish sales. Second, the next most popular type of fish is prepared frozen fish. Sixty-seven of the 69 grocers with sales of $100,000 or more per annum offered prepared frozen fish to their customers, whereas 14 of the 29 small grocers (sales under $100,000) handled frozen fish. Prepared frozen shell fish is offered by fewer stores than prepared frozen fin, although there is a tendency to handle both as the stores become larger. Third, the retail unit is more likely to carry whole or processed frozen fish as the size of the store increases, until everyone did so among the group 4 stores. Here, too, fewer stores had whole or processed frozen shell than fin fish, but

there is a tendency to offer both as one progresses from the smallest to largest groups of stores. Fourth, there is a direct relationship between the size of general line store and the sale of fresh fish. No one in group 1 sold fresh fish; 19% had fresh fish in group 2; 50% handled fresh fish in group 3, while 76% in group 4 sold fresh fish.

(a6) Composite Profile of General Line Stores' Fish Sales

Another way of utilizing the general line retail sales data in Table 3 is to construct an average or typical profile of fish sales for each group. Table 4 presents these results.

Two major inferences may be drawn from the data in Table 4. First, these data support the summarizations of the trends described above. Second, the composite of all general retailers (column 5 of Table 4) points up the fact that 53.5% of a typical store's full line fish sales would be canned fish; all forms of frozen fish would

account for an additional 39% of its sales, while fresh fish would represent 7.5% of the store's fish sales.

b. Specialty Line

Unlike the general line retailers, group 1 specialty fish or meat markets emphasized fresh fish. Reference to Table 3 once again reveals that 5 of the 8 markets concentrated solely on fresh fin and/or fresh shell fish. Each of 3 remaining specialty shops in group 1 also emphasized fresh fin, but they carried some form of prepared or processed frozen fish in addition to fresh fish.

The larger size group 2 specialty fish or meat market's fish sales differed substantially from group 1's sales pattern. Every one of the 4 markets handled some variety of prepared or processed frozen fish. Only 2 of the 4 markets, however, had fresh fin. With the exception of canned fish, group 2 specialty markets, consequently, resembled group 3 general line retailers more closely than group 1 specialty markets. Among both group 1 and group 2 specialty markets, one unit in each group carried canned fish.

TABLE 3

PERCENTAGE SALES BY STORE GROUPS

Type of Store	Percentage of Sales Ranges								
	Whole or Processed				Prepared				
	Fresh		Frozen		Fresh		Frozen		
	Fin	Shell	Fin	Shell	Fin	Shell	Fin	Shell	Canned
A. General Line									
1. Sales to $99,999 [29]									
12 Stores									100%
6 Stores							10-50%		50-90%
5 Stores							12-43%	8-58%	41-80%
2 Stores			33-43%						57-66%
2 Stores			4-10%	2-22%			16-33%	9-24%	54-58%
1 Store			23%				29%	9%	39%
1 Store			30%	20%					50%
2. $100,000-$499,999 [26]									
7 Stores			2-20%	4-35%			6-43%	9-20%	28-73%
6 Stores							12-36%	12-39%	36-76%
3 Stores			3-16%				12-20%	8-19%	56-64%
2 Stores				9-11%			11-19%	20-35%	45-50%
1 Store							64%		36%
1 Store			18%	7%			25%		50%
1 Store				6%			21%		73%
1 Store			16%				15%		71%
1 Store	17%						16%	16%	51%
1 Store	22%		9%				5%	11%	53%
1 Store	7%		5%	12%			12%	25%	39%
1 Store	27%	21%					7%	4%	41%

Source: Survey Data.

TABLE 3

PERCENTAGE SALES BY STORE GROUPS

Type of Store	Percentage of Sales Ranges								
	Whole or Processed				Prepared				
	Fresh		Frozen		Fresh		Frozen		
	Fin	Shell	Fin	Shell	Fin	Shell	Fin	Shell	Canned
A. General Line (continued)									
3. $500,000 to $999,999 [18]									
3 Stores							11-42%	19-42%	16-70%
3 Stores			2-17%	6-27%			6-18%	6-28%	25-66%
1 Store				14%			32%	9%	45%
1 Store			22%				9%	14%	55%
1 Store			14%	19%			19%		48%
2 Stores	8-28%		5-7%	3-13%			24-25%	6-21%	29-31%
1 Store	8%		9%						83%
1 Store	9%	14%						42%	35%
1 Store	35%	14%					23%	5%	23%
1 Store	11%	23%	11%					8%	47%
1 Store	69%				31%				
2 Stores	7-12%	9-16%	1-22%	4-8%			2-3%	1-8%	43-64%
4. $1,000,000 & Over [25]									
7 Stores	1-13%	1-32%	3-22%	3-18%			2-34%	2-14%	20-59%
6 Stores	6-11%		3-26%	6-20%			8-22%	2-20%	23-63%
3 Stores	10-36%		1-9%	1-4%	1-7%		4-18%	1-6%	48-75%
1 Store	8%		1%	2%	1%	1%	14%	19%	54%
1 Store	13%	8%	4%				2%	15%	58%
1 Store	4%		1%				21%	7%	67%
3 Stores			4-11%	1-22%			4-26%	2-16%	51-68%
1 Store				11%			26%	24%	39%
1 Store			58%				17%		25%
1 Store			23%	5%			7%		65%

TABLE 3

PERCENTAGE SALES BY STORE GROUPS

Type of Store	Percentage of Sales Ranges								
	Whole or Processed				Prepared				
	Fresh		Frozen		Fresh		Frozen		
	Fin	Shell	Fin	Shell	Fin	Shell	Fin	Shell	Canned
B. Specialty Line									
1. Sales to $99,999 [8]									
3 Stores	59-91%	9-41%							
2 Stores	100%								
1 Store	56%	6%					38%		
1 Store	64%	5%					10%	10%	11%
1 Store	94%		6%						
2. $100,000-$499,999 [4]									
1 Store	60%						40%		
1 Store	52%		7%	18%			18%	5%	
1 Store			56%	33%					11%
1 Store							100%		

Source: Survey Data.

TABLE 4

COMPOSITE PROFILE OF FISH SALES FOR EACH GENERAL LINE GROUP, IN PER CENTS

Type of Fish	Annual Sales Groups				
	Group 1 (29 Stores)	Group 2 (26 Stores)	Group 3 (18 Stores)	Group 4 (26 Stores)	All Groups (98 Stores)
Canned Fish	73%	52%	42%	47%	53.5%
Prepared Frozen Fin Fish	15	20	14	14	15.7
Prepared Frozen Shell Fish	4	14	13	8	9.8
Whole or Processed Frozen Fin	6	5	9	12	8
Whole or Processed Frozen Shell	2	5	7	8	5.5
Whole or Processed Fresh Fin	-	3	10	7	5
Whole or Processed Fresh Shell	-	1	3	3	1.7
Prepared Fresh Fin	-	-	2	1	.8
Prepared Fresh Shell	-	-	-	-	-
Total Sales Percentage	100%	100%	100%	100%	100%

Source: Survey Data.

VI. RETAILER'S MARKUP

Retail margins derived from the Department of Labor's Consumer Price Index for 33 cities throughout the United States show the retail margin for canned tuna is typically 20% of the retail selling price and approximately 30% for frozen haddock. The margin for fresh fish ranges from 25 to 38% of retail selling price in several recent Sea Grant studies dealing with the marketing of fresh fish. With these margins as guidelines, the markup figures from our survey given in Table 5 may be more meaningful to the reader.

(a) Problems relating to Markup Data

Several problems were encountered in gathering markup percentage information. First, several retailers candidly commented they did not know what their markup was on canned or frozen fish. Second, some managers refused to disclose this information, saying it was confidential. Third, different employees were responsible for fresh versus frozen versus canned fish in some of the stores. When our interviewers were unable to communicate with each individual, the other interviewee(s) estimated the markups for the alternate forms of fish handled. Fourth, managers often related a markup figure purportedly based on the cost of goods. In reality, the figures repre-

sented markup based on retail price rather than cost. In order to confirm the markup base used, wholesale suppliers and chain warehouses were contacted. Wholesalers typically listed the cost as well as suggested retail price on their forms. The markups given by retailers to our interviewers were not based on cost, but generally on the suggested retail price. The chain store warehouses which were contacted also reported their markups were on the retail price base for control purposes. Some of the chain stores' markup data, consequently, had to be adjusted to the retail price base when it was evident that a discrepancy existed.

(b) General Line Markups

(b1) Group 1.

The markup practices followed by general line grocers in group 1 (sales to $99,999) are quite interesting. Markups on canned fish ranged from 12 to 25%, although most small stores marked up their canned fish at 20% on retail. Twelve of the 16 stores handling frozen and canned fish, moreover, marked up both types the same percentage. Such a markup policy is simple to apply, but

these entrepreneurs failed to attain a higher markup on frozen fish over canned fish reflected in the national figures. Three of the remaining firms handling both frozen and canned fish marked up their frozen fish higher than canned fish, while one firm reported a higher markup for canned fish than for prepared frozen fin and shrimp. Two of the proprietors in this group had no knowledge of their markup on fish.

(b2) Group 2.

All retailers in group 2 ($100,000-$499,999 annual sales) carried some form of whole or prepared frozen fish and/or fresh fish along with canned fish. That is to say, all offered more than canned fish to their customers. Despite the different forms of fish handled, 13 of the 26 establishments (50%) reported they marked up all fish products an identical percentage. Markup among these stores ranged from 18 to 25% of retail price. Twelve establishments, on the other hand, marked up

canned fish a lesser percentage than frozen or fresh fish. Two of the stores also marked up frozen shrimp a lesser percentage than frozen fin fish. A comparison of the typical markups among the stores in group 1 with those in group 2 indicates the establishments in group 2 had a slightly higher average markup on each type of frozen fish. The average markup on canned fish, however, was nearly identical between these two groups.

(b3) Group 3

One general line grocery store manager in group 3 ($500,000-$999,999) refused to discuss his markups on fish. Among the remaining 17 firms that did provide this information, only 3 firms (18%) adopted a uniform percentage markup policy. One store reported a larger markup on canned fish than on frozen fin and shell fish, while another store evidently had a lesser markup on fresh fish than canned fish. Eleven establishments, however, marked up fresh and frozen fish a higher per-

centage of sale price than canned fish. Unlike some of the stores in group 2, all establishments handling frozen fin and shrimp marked up both varieties the same proportion. The typical markup on frozen fin fish is somewhat higher for group 3 stores than group 1 and group 2 stores. Conversely, the markup on fresh fin and shrimp is under the typical markup of group 2 stores handling fresh fish.

(b4) Group 4.

Four of the 25 general line grocery store managers in group 4 ($1,000,000 or more annual sales) said it was contrary to their chain's corporate policy to discuss markup procedure. Only one of the 21 respondents utilized a standard markup on all products. The remaining 20 establishments had a lesser markup on canned fish, but 55% did employ a standard markup on all the other varieties. Among the firm's that varied their markup, two had a lower markup on whole or processed frozen fish than on prepared frozen fish.

Another firm reversed the procedure with a higher markup on prepared frozen fish than on whole or processed frozen fish. The average markup figures for group 4 show all forms of fresh and frozen fish were typically marked up at approximately 25% of retail selling price, with the exception of fresh shell at 24%. A comparison with the other general line groups indicates that group 4's average markups are fairly similar to those in group 3 for whole or prepared fish. Group 4's average markup on canned fish, however, is approximately 20% under that of the other groups.

(c) Specialty Line Markets

Six of the eight group 1 specialty line fish or meat markets handled more than fresh fin fish. Similar to group 1 small general line grocery stores, two-thirds of the small specialty line outlets utilized an identical percentage markup on all fish carried within their respective stores. Two of the three larger group 2 specialty line markets handling more than one type of fish had a similar markup policy. Computation of

average markups for specialty line markets is inappropriate because so few markets in either group 1 or group 2 carried the same type of fish other than fresh fin. The average markup for fresh fin fish by specialty line markets clearly is higher than the average markup of general line stores handling fresh fin.

(d) Recapitulation

Because of the problems encountered in obtaining markup information, it is difficult to generalize from these data. One is intrigued, nonetheless, by the fact so many stores reported they marked up all types of fish, or all but canned fish, the same proportional amount. Secondly, although there were substantial differences in markups employed among various stores, the average markups between the different groups were quite similar with the exception of group 1 small general line grocers, who tended to mark up their frozen fish less than the other general line groups and group 4 retailers, with a lesser average markup on canned fish. Lastly, the average markups on fresh and frozen fish reported by retailers in Northern Ohio were somewhat less than typical markups derived from other sources.

TABLE 5

RETAIL MARKUP ON SELLING PRICE, IN PERCENTAGES

Type of Stores	Whole or Prepared				Prepared				
	Fresh		Frozen		Fresh		Frozen		
	Fin	Shell	Fin	Shell	Fin	Shell	Fin	Shell	Canned
A. General Line									
1. Sales to $99,999 [29]									
9 stores									20%
1 Store									22%
1 Store									25%
1 Store							12%		12%
1 Store							18%		18%
3 Stores							20%		20%
1 Store							30%		22%
1 Store							18%	18%	20%
1 Store							20	20	20
1 Store							25	25	25
1 Store							30	30	25
1 Store			25						25
1 Store			25						20
1 Store			20	20					20
1 Store			20				20	20	20
1 Store			22	22			22	22	22
1 Store			25	25			25	25	25
2 Stores*									
Avg. Markup			(23)	(22.3)			(21.5)	(22.8)	(20.8)
2. $100,000 to $499,999 [26]									
4 Stores							20	20	20
1 Store							25	25	20
1 Store							25	25	25
1 Store							28	28	25
1 Store			18	18			18	18	18
1 Store			20	20			20	20	12
1 Store			23	23			23	23	20
2 Stores			25	25			25	25	25
1 Store			25	20			25	23	14
1 Store			26	23			26	23	15
1 Store			30	30			30	30	20
1 Store			25				25		25
2 Stores			25				25	25	20
1 Store				20			20		
1 Store				20			20	20	20
1 Store				25			25	25	20
1 Store			22	22			22		22
1 Store	30						30	30	25
1 Store	20		25				25	25	20
1 Store	25		25				25	25	25
1 Store	30	30					30	30	25
Avg. Markup	(26.2)	(30)	(26.1)	(23.7)			(23.7)	(23.9)	(21)

*Don't know or confidential.

TABLE 5

RETAIL MARKUP ON SELLING PRICE, IN PERCENTAGES

Type of Stores	Whole or Prepared Fresh Fin	Whole or Prepared Fresh Shell	Whole or Prepared Frozen Fin	Whole or Prepared Frozen Shell	Prepared Fresh Fin	Prepared Fresh Shell	Prepared Frozen Fin	Prepared Frozen Shell	Canned
3. $500,000-$999,999 [18]									
1 Store							17	17	20
1 Store							30	30	10
1 Store							30	30	25
1 Store			25				25	25	20
1 Store			22	22			22		20
1 Store				22			22	22	20
2 Stores			25	25			25	25	20
1 Store			25	25			25	25	25
1 Store	30		30						25
1 Store	20		25	25			25	25	25
1 Store	30		28	28			28	28	25
1 Store	30		30					30	25
1 Store	20	20					20	20	20
1 Store	22	22	22	22			22	22	22
1 Store	28	28	30	30			25	25	23
1 Store	25				25				
1 Store*									
Avg. Markup	(25.6)	(23.3)	(26)	(25)	(25)		(24.4)	(25)	(21.5)
4. $1,000,000 & over [25]									
1 Store			25				25		20
1 Store				25			25	25	15
1 Store			27	27			27		20
1 Store			27	27			27	27	20
1 Store			28	28			28	28	15
1 Store			25	25			20	20	18
1 Store	25		25	25	25		25	25	20
1 Store	25		25	25			25	25	12
1 Store	25		25	22	25	25	25	25	12
1 Store	28		28	28	28		28	28	20
1 Store	25		30	30	25		30	30	20
1 Store	25		28	28			25	25	12
1 Store	30		25	25			25	25	18
1 Store	25		25				25	25	20
1 Store	25	25	20	20					15
1 Store	20	20	20	20			20	20	20
1 Store	25	25	25	25			28	28	12
1 Store	30	25	20	20			20	20	20
1 Store	25	25	25				25	25	20
1 Store	25	25	25	25			25	25	20
5 Stores*									
Avg. Markup	(25.6)	(24.1)	(25.1)	(25.0)	(25.6)	(25)	(25.1)	(25.1)	(17.5

* Don't know, or Confidential.

TABLE 5

RETAIL MARKUP ON SELLING PRICE, IN PERCENTAGES

Type of Stores	Whole or Prepared				Prepared				
	Fresh		Frozen		Fresh		Frozen		
	Fin	Shell	Fin	Shell	Fin	Shell	Fin	Shell	Canned
B. Specialty Line									
1. Sales to $99,999[8]									
1 Store	33								
1 Store	30								
1 Store	22	22							
2 Stores	25	25							
1 Store	30		20						
1 Store	30			30			30		
1 Store	22	22					22	22	22
Avg.Markup(27.1)									
2. $100,000-$499,999[4]									
1 Store	25		25	25			25	25	
1 Store	28						28		
1 Store			20	25					20
1 Store							25		

* Don't know or Confidential

Source: Survey Data.

VII. SOURCES OF SUPPLY

The 110 retailers in this study obtained their fish from 24 different wholesaler sources (identified by letters A - X in Table 6) as well as their own central chain store warehouses and other retailers. Two very small general line grocers handling canned tuna said they actually purchased their tuna from larger retailers when the latter ran specials, because the minimum order quantity exceeded the inventory they wanted to carry.

The independent wholesale sources varied from general line grocery wholesalers to specialized fish wholesalers. All retailers were within 70 miles of the intrastate wholesalers listed. Two wholesalers, however, were situated outside the state of Ohio.

The data in Table 6 clearly reflect the retailers' procurement practices. First, since the establishments in group 4 are primarily chain stores, their policy of securing canned, frozen and fresh fish from their company warehouses is easily discernible. Second, very few retailers reported purchasing the same form of fish from several sources. They appear to be totally dependent on the vicissitudes of a single supplier as a consequence. Third, most nonchain retailers purchase their frozen as well as canned fish from the same source. Fourth, when purchases are consummated with different suppliers, they most likely are bifurcated on the basis of suppliers of fresh versus

frozen and canned fish. This is not to say, however, that no one purchased processed frozen fish from one source and prepared frozen fish from another source. A few retailers did so, but not many.

TABLE 6

SOURCES OF SUPPLY

Type of Stores and Fish	Sources of Supply and Number of Stores Buying From Them.																							Chain Warehouse	Other Retailers
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X		
A. General Line Stores																									
1. Sales to $99,999																									
Fresh-Processed																									
Fresh-Prepared																									
Frozen-Processed													1					5					1		
Frozen-Prepared			1						1			1						10							
Canned			1						1	2		2	3					16						1	2
2. $100,000-$499,999																									
Fresh-Processed						1									1				1	1					
Fresh-Prepared																									
Frozen-Processed		4											1	1				12							
Frozen-Prepared		3											1	3				18							
Canned		4												1				19						1	
3. $500,000-$999,999																									
Fresh-Processed						1		1			1									6					
Fresh-Prepared								1																	
Frozen-Processed	1	1		1	1												1	9							
Frozen-Prepared	1	1			1									1	1	1		11							
Canned	1	1			1		1							1		1		12							
4. $1,000,000 & over																									
Fresh-Processed						3											3		1	2	1	1			9
Fresh-Prepared						1														1		1			1
Frozen-Processed		3				2												3		2					15
Frozen-Prepared		3																	3	2					17
Canned		3																3							18

TABLE 6
(Continued)
SOURCES OF SUPPLY

Type of Stores and Fish	Sources of Supply and Number of Stores Buying From Them. A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Chain warehouse	Other Retailers
B.Specialty Line																										
I.Sales to $99,999																										
Fresh-Processed						4														4	1					
Fresh-Prepared																										
Frozen-Processed						1															1					
Frozen-Prepared						2																				
Canned																		1								
2.$100,000-499,999																										
Fresh-Processed						1															1					
Fresh-Prepared																										
Frozen-Processed														1				1								
Frozen-Prepared						1								1				1								
Canned																		1								

VIII. TRENDS IN RETAILERS' FISH SALES THE PAST FIVE YEARS

Retailers were asked if their fish sales had increased, remained the same, or declined the past five years. They were also asked why they thought these trends had occurred. The data showing trends are summarized in Table 7. The retailers' explanation of these trends are given in Table 8.

(A) Trends

Beginning with Table 7, it can be seen in the total column that more retailers reported declines in sales of fresh, frozen and canned fish than those who reported there was either no change or an increase in sales. Among the groups, however, more general line grocers in group 3 ($500,000 to $999,999 annual sales) reported increases in the sales of frozen and canned fish than those who said their sales of these products had declined. Similarly, more general line group 4 retailers ($1,000,000 and over annual sales) reported frozen fish sales had gone up than those who replied their frozen fish sales had dropped.

(B) Reasons Why

The retailers' expalantions of these trends in Table 8 indicate expansion of a store's offering was the primary factor for increased

sales, especially frozen fish. The second reason mentioned most often as an explanation of increased sales was the fact that fish (especially frozen) is still "cheaper than beef" and "cheaper meal" (canned). The third reason given was "more weight watchers."

Few retailers had any explanation why their sales trends had neither decreased nor increased. Among those who did, however, "pollution scare" was the reason given. That is to say, consumers either were reluctant to eat more fish, or sales had returned to normal after the initial impact of each pollution warning.[1]

The decline in sales trend reported by so many retailers also was attributed by many to "pollution scares." The next most frequently given reasons were the "higher prices" of fresh, frozen and canned fish, as well as the "Pope's dietary edict" waiving the number of days fish was recommended as a dietary item. Readers who examine Table 8 carefully, however, will note

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[1] See J. O. Peckham, Jr. and David Glaser, "Government Sanctions - A New Force in the Marketplace," a special presentation to the American Marketing Association's 2nd Annual Midwest Marketing Research Conference, Chicago, Illinois, March, 1972.

that one respondent thought the Pope's edict actually increased the consumption of canned fish because people were no longer required to eat fish on specific days.

TABLE 7

TRENDS IN RETAILERS' FISH SALES

THE PAST FIVE YEARS

Form of Fish	Number of Stores and Trend Reported: General Line Retailer Groups 1	2	3	4	Specialty Line	Total
Fresh Fish						
+ Sales	0	0	2	2	3	7
No Change	0	2	2	5	3	12
- Sales	0	2	6	13	4	25
Frozen Fish						
+ Sales	4	5	6*	11*	1	27
No Change	4	6	6	8	4	28
- Sales	8	15	5	6	2	36
Canned Fish						
+ Sales	4	4	6*	5	0	19
No Change	11	7	6	11	0	35
- Sales	12	15	5	9	2	43

* Greater number reporting increases than declines in sales.

Source: Survey Data.

TABLE 8

RETAILERS' EXPLANATIONS OF SALES TRENDS

Reasons Related by Retailers As Explanation of Increase in Sales Trend	Number of Replies for Form of Fisn*			
	Fresh	Frozen	Canned	Total
Cheaper than beef	1	5	1	7
Cheaper than fresh fish		2		2
Better than fresh fish		1		1
Safer than fresh fish		2		2
Cheaper meal			3	3
Convenient Meal		2		2
Store expanded its offering	1	12	6	19
More weight watchers	1	2	3	6
Area turned black	1	1	1	3
General population growth			1	1
Pope's Dietary Edict (eat more)			1	1
No reason given	3	1	2	6
Explanation of No Change in Sales Trend				
Pollution Scares	1	3	4	8
No reason given	11	25	31	67
Explanation of Decline in Sales Trend				
Pollution Scares	19	24	27	70
Pope's Dietary Edict (eat less)	7	12	11	30
Higher Price	9	10	12	31
Undependable Supply	1			1
Population in Area		1		1
Store reduced its offering			1	1
No reason given		1	2	3

* Some respondents gave several reasons.

Source: Survey Data.

IX. RETAILERS' PREFERENCE IN HANDLING FRESH VERSUS FROZEN FISH

(a) Preferences

After relating their sales trends for fresh, frozen and canned fish, retailers were asked if they preferred handling fresh or frozen fish. Tabulation of the responses in Table 9 shows a strong proclivity for frozen fish.

Among the small group 1 general line retailers (sales to $99,999), 12 reported no preference since they carried neither fresh nor frozen fish. One respondent in this group with frozen fish, however, said he would prefer handling fresh fish because consumers really liked fresh fish better than frozen fish. Among respondents in general line groups, those who professed no preference already handled both fresh and frozen fish. They indicated they offered whatever the consumer wanted. The group 3 stores ($500,000 to $999,999 annual sales) provided the largest number of proponents for fresh versus frozen fish. Surprisingly, merely 40% of the specialty markets preferred fresh fish while 60% were either indifferent or preferred handling frozen fish.

TABLE 9

RETAILERS' PREFERENCE IN HANDLING FRESH VS. FROZEN FISH

	Preferences					
	General Line Groups					
	Group	Group	Group	Group	Specialty	
Form of Fish	1	2	3	4	Groups	Total
Fresh	1	2	7	5	5	20
Frozen	16	23	10	17	3	69
No preference	12*	1	1	3	4	21

*Handled canned only.

Source: Survey Data.

(b) Reasons Why

The reasons given by retailers for their preference in handling either fresh or frozen fish are summarized in Table 10. When more than one reason was given by a respondent, each reason was tallied separately. The retailers who preferred handling fresh fish did so because consumers generally preferred fresh fish. They also reported consumers specifically preferred fresh fish because it tasted better or represented better quality. Two retailers preferred handling fresh fish to frozen fish because it was more profitable. Another respondent said fresh was easier to handle than frozen fish.

Fourteen percent of the reasons why retailers preferred handling fresh fish were associated with ease of handling or profitability while 86% were attributed to consumer preference,

taste, and quality. The situation is reversed for frozen fish. Seventy-one percent of the responses concerning offering frozen fish are essentially ease of handling responses. For example, "easier to handle in store" was specifically mentioned 28 times. "No facilities for fresh fish" and "less spoilage or waste" were each mentioned 14 times. Similarly, such reasons as "no odor," "dependable supply" and "more profitable" are also retailers' preferences rather than consumers' preferences. From the consumer's point of view, "consumer's prefer frozen" was mentioned nine times; "cheaper than fresh" ten times; "a better quality product" five times; and "people want convenience" was mentioned once.

The dichotomy among merchants handling fresh or frozen fish is further reflected in Table 10 in several intriguing ways. For instance, the responses "better quality," "more profitable," "easier to handle," and "customer's preference" appear on both lists of reasons why retailers prefer handling either fresh or frozen fish. Retailers evidently have not resolved such issues as (a) what form of fish is better in quality, (b) easier to handle, or (c) more

profitable. On this latter point, moreover, two specialty markets specifically said there was no profit in fresh fish. They sold it because customers preferred fresh fish.

Table 10

REASONS WHY RETAILERS PREFERRED FRESH OR FROZEN FISH

Reasons Related by Retailers	Number of Replies by Each Group					
	Group 1	Group 2	Group 3	Group 4	Specialty Groups	Total
REASONS FOR FRESH FISH						
Customers preference for fresh	1	1	1	4	5*	12
Better taste		1	2			3
Better Quality			3			3
More profitable			2			2
Easier to handle than frozen				1		1
REASONS FOR FROZEN FISH						
Easier to handle in store	2	10	3	10	2	28
No facilities for fresh	6	6	1	1		14
Less spoilage or waste	2	4	2	6		14
Customers preference for frozen	4	2	3			9
Cheaper than fresh	1	5	1	3		10
Better quality product	1			3	1	5
No odor with frozen		2	2			4
Consistent, dependable supply	1	2			1	4
More profitable			2			2
People want convenience			1			1
People catch own fresh			1			1
No reason given	1					1

*Although they handled fresh fish, two specialty markets reported there was no profit in fresh fish.

Source: Survey Data.

X. WHAT TYPE OF BRAND NAMES APPEAR ON THE STORES' FISH FISH PRODUCTS?

(a) Types of Brands

Because no published information was found concerning types of brands associated with the merchandising of fish, several questions in the exploratory survey probed in this area. The type of brands utilized by various retailers are categorized in Table 11. Processors' brands are the brand names attached to the product by the processing companies. Mrs. Paul's, Star Kist and Bumble Bee are examples of processor's brands. Store or house brands are brand names of the resellers. A&P's Captain John's, Fisher-Fazio's Heritage House, or IGA's labels are store brands.

(b) Fresh Fish Brands

Fresh fish is unique due to the absence of brand names. Some stores sold fresh fish from trays while others offered it on a prepackaged, prepriced basis. Managers selling prepackaged, prepriced fresh fish occasionally insisted their fresh fish carried a store brand because the store's reputation was behind the product and the price labels contained the store's name. Since these labels are designed to convey the price of the product rather than promote it, they clearly

are not store brands.

(c) Frozen Fish Brands

Frozen and canned fish, on the other hand, are heavily branded products. Turning to frozen fish, processors' brands are more prevalent than store brands. Moreover, where store brands are carried, they almost always are offered along with national brands. With the exception of the small group 1 general line retailers and the specialty groups, 35 to 45% of the stores in groups 2, 3, and 4 handled store brands as well as processors' brands. Another interesting merchandising technique is the practice of some stores of repackaging and prepricing larger cartons of frozen fish or the freezing of unsold fresh fish. Such frozen fish is unbranded because the only identification it carries is the species of fish and the price tag.

(d) Canned Fish Brands

The patterns concerning the brands of canned fish are very similar to frozen fish. No specialty markets and only two small group 1 general line retailers, for example, offer store brands. All group 2, 3, and 4 retailers with store brands of canned fish dual them with processors' brands. The distinct difference in

branding practices between frozen and canned fish is the fact unbranded frozen fish was found in some group 3 and group 4 stores, whereas no one handled unbranded canned fish.

(e) Customer's Brand Preference for Fresh Fish

After the types of brands were determined, respondents were asked which brand they thought their customers preferred. Their replies in Table 12 disclose the fact some store managers think their customers might prefer recognized processors' brands of fresh fish. A lesser number who insisted their stores' reputation and price labels were really store brands, thought their customers preferred this practice. A majority of the respondents, however, said customers had no labeling or brand preference as far as fresh fish was concerned.

(f) Customer's Brand Preference for Frozen and Canned Fish

Despite the divergence of opinion about customers' brand preference for fresh fish, comments about customers' brand preferences for frozen and canned fish approached unanimity. Store managers agreed that customers "preferred processors' brands" versus "exhibited no preference" by an 11 to 1 ratio for frozen as well as canned

fish. No one said customers preferred store brands of canned fish to processors' brands; and only two thought their customers preferred store brands of frozen fish to processors' brands, despite the fact no fewer than 30% of these stores in groups 2, 3, and 4 offered some variety of frozen or canned fish under their own labels.

(g) Affect of Additional Branding on Sales

The last question in the series dealing with brands and branding was, "Would additional branding increase your sales?" The data in Table 13 show that most of the retailers believe additional branding would have no impact on the sale of fish. Among the minority who believe additional branding would increase sales, there is a larger proportion who believe the impact on sales of fresh wish would be greater than on frozen fish or canned fish. It is also interesting to note that the respondents who view the impact of additional branding in a positive manner are predominantly managers of the largest group 4 general line stores.

TABLE 11

TYPE OF BRAND NAMES APPEARING ON STORES' FISH PRODUCTS

Form of Fish and Type of Brand	Store Group and Number: General Line Stores Group 1	Group 2	Group 3	Group 4	Specialty Groups	Total
Fresh Fish						
Processor's Brand	-	-	-	-	-	-
Store's Brand	-	-	-	-	-	-
Both Processor's & Stores	-	-	-	-	-	-
No Brand Name	-	4	9	19	10	42
Frozen Fish						
Processor's Brand	17	26	17	24	6	90
Store's Brand	2	11	6	12	1	32
Both Processor's & Store's	2	11	6	11	-	30
No Brand Name	-	-	3	6	-	9
Canned Fish						
Processor's Brand	28	26	17	24	2	97
Store's Brand	2	11	5	15	-	33
Both Processor's & Store's	2	11	5	15	-	33

Source: Survey Data

TABLE 12

RETAILERS' OPINION OF CUSTOMERS BRAND PREFERENCE

Form of Fish and Type of Brand	Store Group and Number: General Line Groups Group 1	Group 2	Group 3	Group 4	Specialty Groups	Total
FRESH FISH						
Processor's Brand	-	-	1	7	2	10
Store's Brand	-	1	-	1	5	7
No Preference	-	3	8	11	3	25
FROZEN FISH						
Processor's Brand	16	26	15	18	7	82
Store's Brand	-	-	-	2	-	2
No Preference	1	-	2	4	-	7
CANNED						
Processor's Brand	27	26	15	18	2	88
Store's Brand	-	-	-	-	-	0
No Preference	1	-	2	5	-	8

Source: Survey Data.

TABLE 13

RETAILERS OPINIONS OF IMPACT OF ADDITIONAL BRANDING ON SALES

Form of Fish and Impact on Sales	Store Group and Number: General Line Groups Group 1	Group 2	Group 3	Group 4	Specialty Groups	Total
FRESH FISH						
Increase Sales	-	1	1	10	-	12
No Change In Sales	-	3	7	8	8	26
Don't Know	-	1	1	1	2	5
FROZEN FISH						
Increase Sales	-	2	1	9	-	12
No Change in Sales	8	12	13	14	3	51
Don't Know	9	12	4	2	3	30
CANNED FISH						
Increase Sales	-	1	1	7	-	9
No Change in Sales	28	20	13	15	-	76
Don't Know	-	5	3	3	2	13

Source: Survey Data.

XI. PROMOTIONAL PRACTICES

Promotional practices of retailers were explored on the basis of: (a) external promotion designed to attract customers to the store for fish, and (b) internal promotion designed to stimulate fish sales at point of purchase - the store.

(a) External Promotion

The promotional media utilized to bring people to the store are recapitulated in Table 14. The data in Table 14 show several patterns. First, the number of stores within each group engaged in advertising is related directly to the annual sales of the group, that is, the larger the store in each category, the more they advertise. Second, the relative number of general line retailers in each category who advertise fresh fish is less than the proportion who advertise frozen or canned fish. Third, newspaper advertisements are by far the most frequently used method and medium.

(b) Instore Promotion

The instore promotional activities to increase fish sales at point of purchase in Table 15 closely parallels the patterns found for external promotion. First, most stores rely on their stock display as their only point-of-purchase

promotion technique. The larger the store's sales category, however, the more it uses other instore promotional techniques. Secondly, the same relative emphasis on promoting frozen or canned fish rather than fresh fish is evident internally as it was externally. Third, once again more weight by far is placed on a specific method to stimulate fish sales internally, as was true externally. The point of purchase technique used by 3 of 4 stores, who rely on more than just their displays, is a combination of stock display, price promotion, and window posters or extra signs.

TABLE 14

PROMOTIONAL MEDIA USED BY THE STORES
TO PROMOTE FISH HANDLED

TYPE OF STORE AND MEDIA USED	FORM OF FISH & RESPONSES		
A. General Line [29]	Fresh	Frozen	Canned
Group 1. Sales to $99,999			
Affiliated newspaper ads	-	3	3
None	-	14	25
Group 2. Sales of $100,000-$499,999 [26]			
Affiliated group newspaper ads	-	11	12
Affiliated group newspaper ads and hand bills	-	2	2
None	4	13	12
Group 3. Sales of $500,000-$999,999 [18]			
Affiliated group newspaper ads	2	4	4
Own newspaper ads	1	1	1
Home mailers	-		1
Hand bills	-	1	1
None	6	11	10
Group 4. Sales of $1,000,000 and over [25]			
Affiliated group newspaper ads	2	4	4
Chain newspaper ads	10	14	13
Newspaper ads and home mailers	1	3	3
Newspaper ads, home mailers & radio	1	1	1
Newspaper ads, radio & TV	-	2	2
None	5	1	2
B. Specialty Markets [12]			
Newspaper and home mailers	1	-	-
Radio	1	-	-
None	8	7	2

Source: Survey Data

TABLE 15

INSTORE PROMOTIONAL TECHNIQUES

TYPE OF STORE AND PROMOTIONAL TECHNIQUES UTILIZED	FORM OF FISH AND NUMBER OF RESPONSES		
	FRESH	FROZEN	CANNED
A. General Line Retailers			
Group 1. Sales to $99,999 [29]			
Extra signs and stock display	-	1	2
Stock display only	-	16	26
Group 2. Sales of $100,000-$499,999 [26]			
Extra signs & stock display	-	3	3
Window posters & stock display	-	2	2
Window posters, extra signs, stock display	1	1	1
Window posters, price promotion, stock display	-	3	3
Price promotion, stock display	-	-	1
Stock display only	3	17	16
Group 3. Sales of $500,000-$999,999 [18]			
Extra signs & stock display	2	4	3
Window posters & stock display	1	1	2
Extra signs, price promotion, & stock display	-	1	2
Stock display only	6	11	11
Group 4. Sales of $1,000,000 and Over [25]			
Extra signs & stock display	3	3	3
Window posters & stock display	-	1	1
Window posters, extra signs, and stock display	1	2	1
Window posters, price promotion & stock display	3	4	4
Extra signs, price promotion, & stock display	10	11	10
Price promotion & stock displays	-	2	4
Stock displays only	2	2	2

TABLE 15

INSTORE PROMOTIONAL TECHNIQUES

TYPE OF STORE AND PROMOTIONAL TECHNIQUES UTILIZED	FORM OF FISH AND NUMBER OF RESPONSES		
	FRESH	FROZEN	CANNED
B. Specialty Markets			
Stock display only	10	7	2

Source: Survey Data.

XII. RETAILERS' OPINIONS OF WHO BUYS FRESH, FROZEN OR CANNED FISH AND REASONS WHY THEY DO

Because retailers are closer to customers than anyone else in the channel of distribution, they were asked what types of families purchased fresh, frozen or canned fin and shell fish as well as why customers preferred each form of fish. Cumulative tallies of their responses are contained in Tables 16 and 17. Since the data in Tables 16 and 17 are so closely related, we shall discuss the results jointly according to type of fish purchased.

(a) Who Purchases Fresh Fish and Why

Purchasers of fresh fish are described by retailers as (1) older families; (2) either of higher or lower but not middle income; (3) Catholics; (4) Blacks, Jews or foreign-oriented ethnic groups (Italian, Polish, Greek, Slovenian, Serbian); (5) weight-watching, health conscious families; or (6) possibly people who grew up near water where they had access to fresh fish. The reasons why retailers believe these people prefer fresh fish are because the purchasers think fresh fish either (1) tastes better or (2) is better in quality.

(b) Who Purchases Frozen Fish and Why

Frozen fish buyers, on the other hand, are described as (1) younger rather than older

families; (2) larger size families; (3) middle to low income; (4) families whose wives work and/or desire convenience. Frozen fish purchasers are also identified as "all types of families" more often than by religious or racial background. Frozen fish is preferred to fresh fish, according to retailers, because it is (1) more convenient to use, that is, ready to cook or heat; (2) it is an inexpensive meal; (3) frozen fish is easy to store and use any time during the week; (4) a large variety and selection is always available at stores; and (5) some think the quality and taste is better than fresh fish.

(c) Who Purchases Canned Fish and Why

Terms used by retailers to describe canned fish customers are similar to those associated with frozen fish buyers. For example, typical customers are identified as (1) younger, (2) larger size, (3) low income or welfare families, as well as (4) families whose wives work. A preponderant number of retailers, however, view canned fish as a standard grocery item purchased by all types of families because it is convenient to use and ready to eat. Many retailers further mentioned that this was the only way to obtain such species as tuna, sardines,

salmon and mackerel. Finally, several retailers commented that people who dislike fish (fresh or frozen) purchase canned varieties because they do not identify canned species as fish.

TABLE 16

RETAILERS' OPINIONS* OF TYPE OF FAMILIES

WHO BUY FRESH, FROZEN, OR CANNED FISH

TYPE OF FAMILY AND ITS CHARACTERISTICS	FORM OF FISH PURCHASED		
	Fresh	Frozen	Canned
No family purchases the product	2	0	0
All types of families purchase the product	3	11	46
Large size families	2	8	9
Middle size families	0	1	0
Small size families	3	3	0
High income families	11	0	0
Middle income families	1	6	0
Low income families	6	3	2
Welfare income families	0	0	2
Older families	23	0	0
Younger families	0	37	19
Catholics	22	4	2
Blacks	21	1	2
Jews	16	0	0
Foreign ethnic groups (Italian, Polish, Greek, Slovak)	9	1	0
People who grew up near water	4	0	0
Weight watching, health conscious families	6	0	0
Families desiring convenience	0	2	1
Families whose wives work	0	4	4
No opinion	34	31	25

* Some retailers gave several opinions. The open-end responses were classified into appropriate groups subsequently, but total more than 110 replies.

Source: Survey Data.

TABLE 17

RETAILERS' OPINIONS* WHY CERTAIN FAMILIES PREFERRED FRESH, FROZEN, OR CANNED FISH.

REASONS FOR PURCHASING	FORM OF FISH PURCHASED		
	Fresh	Frozen	Canned
Think it tastes better	70	4	4
Think quality is better (fresher, texture, moist)	27	7	
Larger variety, better selection available	2	8	
Good cooks can prepare own way	2		
Healthful; diet food	1		1
Less odor	2	5	
Safer	2	4	1
Convenient in general	1		40
Convenient; ready-to-cook		67	
Convenient; ready-to-eat			35
Keeps longer, easier to store		14	4
Inexpensive meal		15	5
Nondiscriminating fish eater		1	
Only way to get mackerel			5
Only way to get sardines			7
Only way to get tuna			15
Only way to get salmon			7
Necessary for salads, casseroles			3
People who dislike fish (don't view canned as fish)			2
No opinion	16		11

* Several opinions were expressed by some retailers. Totals exceed 110 replies, consequently.

Source: Survey Data.

XIII. PROCUREMENT OF FRESH FISH BY RETAILERS

The U. S. fishermen are especially interested in the harvesting and consumption of fresh fish because "foreign countries have crowded us out of frozen and canned."[1] With previous comments of this nature in mind from other authoritative industry spokesmen, several segments of the exploratory survey deal specifically with the procurement, handling, and sale of fresh fish by retailers. Tables 18 through 22 contain compilations of the data regarding actual methods of ordering fresh fish; delivery practices; species carried by retailers; and possible effects of changes in the delivery or availability of designated species.

(a) Ordering Fresh Fish

Beginning with Table 18, 31 of the 42 retailers selling fresh fish either contact the wholesaler whenever they need fresh fish, or they place their orders with the wholesalers' salesmen who call regularly at their stores. Table 18 further shows that less than one-half of chain stores' warehouses provide fresh fish

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1 Presentation of Jacob Dykstra, "National Marine Fisheries Service Division of Market Research and Services Staff Meeting and Marketing Conference," New Bedford, Massachusetts; September 12-14, 1972.

for their retail stores that sell it. The chain warehouses without fresh fish say it is too perishable, too inconvenient, and too small in sales volume to handle for their outlets. They prefer that their units offering fresh fish buy it directly from local wholesalers.

(b) Delivery

Data in the forepart of Table 19 indicate 3 of 5 retailers (60%) receive delivery of fresh fish once a week, generally at midweek for the weekend trade. Only 2 of 5 retailers (40%), therefore, offer fresh fish daily. Over 60% report wholesalers make delivery within 24 hours. Ten of the 16 stores without 24 hour delivery service are chain store units. Most obtain fresh fish from their companys' warehouses, usually on a weekly delivery basis.

(c) Reaction to 24 Hour Delivery Time

When the retailers handling fresh fish were asked, "What would be your reaction to a 24-hour delivery time?" over 60% replied they already had it. An additional 24% said such service was "not worth the trouble," or "don't need it." Only 4 of the 42 stores expressed an interest in the 24-hour delivery proposal. Three of the 4 stores were chain establishments, while

1 store was a specialty fish market. In the same vein, nearly 80% of the retailers thought their customers would be indifferent to a 24-hour delivery time for fresh fish. About 20%, nonetheless, felt there would be "good consumer response" to a 24-hour delivery time. The additional sales envisioned from a 24-hour delivery time were disappointing. Nearly 80% thought there would be no increase in sales, while 20% said they did not know what the increment in sales would be, if any. One retailer, on the other hand, estimated his sales might increase by 10% and another retailer by 25%.

(d) Species Handled

The various species of fresh fish the retailers reported they carried are listed in Table 20. General Line grocers and specialty markets occasionally failed to mention some varieties of shell fish although they were clearly visible. Shellfish, consequently, may be underrepresented in Table 20. Moreover, the fresh water species in Table 20 are usually carried by the specialty markets rather than the general line grocery groups.

The methods utilized by retailers in

determining what species to carry are shown in Table 21. Thirty-five of the 42 retailers base their purchases on customer preference or sales experience. Three retailers carry whatever their supplier or chain warehouse has available. One retailer uses price as his criterion. He handles only those species of fresh fish selling under $1.29 per pound at retail. From Table 21 it is evident that a majority of the retailers envision no effect on sales if they could order particular species from wholesalers.

(e) Under-Utilized Species

Every one familiar with the fishing industry is well aware that the quantities of popular fin and shell fish available for harvesting are limited. Any significant increase in the demand for these species, consequently, will result in a proportionally greater increase in price rather than an increase in supply harvested. An obvious solution to this enigma is greater utilization of the less popular species. A list of under-utilized species, developed with the assistance of several executives from the Office of Sea Grant, was presented to retailers to ascertain if they thought they could profitably sell those species. The results of the interviews

with the 42 retailers who handled some form of fresh fish are summarized in Table 23.

Of the 13 species listed, 50% or more of the retailers responded they might profitably order and sell 4 species - silver hake, mackerel, Pacific cod, and catfish. Mackerel was the most widely recognized specy on the list. Seventeen of the 27 retailers who said they could handle mackerel profitably, however, continue to view it as a canned product. No one, on the other hand, classified silver hake, Pacific cod, or catfish as a canned product. Nearly all of the favorable respondents considered Pacific cod a frozen product, while 55 to 57% felt silver hake would sell better in frozen form and catfish in fresh form.

The "No" respondents consisted of retailers who believed they could not handle the specy profitably plus those who were unfamiliar with the specy. Some respondents, for example, said they knew little or nothing about pollock. Others considered pollock a prepared frozen fish used in fish sandwiches by drive-ins or by schools for lunch programs. Northern shrimp was unprofitable because it was "too expensive" or "too small." Tanner crab was "too expensive,"

lacking in "eye appeal," or "spoiled too fast." Those who reacted negatively to Pacific cod did so because "the taste is too strong." A substantial number of interviewees had never heard of "Blue" mussels or "Calico" scallops. Nevertheless, the basic reason why most retailers would not handle these species was expressed in terms of "no demand." Until consumers were familiar with these species and knew how to prepare them, these retailers asserted they would not handle them. Contributing to the difficulty of popularizing under-utilized species is the negative attitude of some of the retailers. Perhaps this is best illustrated by the proprietor of a specialty fish market who declared, "Selling those fish is like trying to sell crap."

TABLE 18

METHOD OF ORDERING FRESH FISH BY RETAILERS

Method of Ordering Fresh Fish	Retail Groups and Number of Responses: General Line Group 1	General Line Group 2	General Line Group 3	General Line Group 4	Specialty Markets	Total
A. Order from chain's warehouse				7		7
B. Wholesaler calls at store regularly		2	4	6	2	15
C. Contact wholesaler when needed		2	4	3	7	16
D. Combination of above:						
A & B				1		1
B & C				2	1	3

Source: Survey Data.

TABLE 19

FACTORS CONCERNING DELIVERY OF FRESH FISH TO RETAILERS

Factors	Retail Groups and Number of Responses: General Line Group 1	General Line Group 2	General Line Group 3	General Line Group 4	Specialty Markets	Total
Factor A: Number of Deliveries per Week of Fresh Fish to Retailers:						
Once a week	2	8	10	3		24
Twice a week	1		6	2		9
Three times a week	1	1	1	1		4
Four times a week			1			1
Daily			1	3		4
Factor B: Delivery Time for Fresh Fish from Wholesalers:						
Within 24 hours	3	7	9	7		26
Beyond 24 hours	1	2	10	3		16
Factor C: Retailer's Reaction to 24 Hour Delivery Proposal:						
"Have it already"	3	7	9	7		26
"Don't need it"; "not worth trouble"; "no big deal"	1	1	6	2		10
"Good, if supply is consistent", "never enough fresh"		1	1			2
Factor D: Retailer's Opinion of Customer's Response to 24 Hour Delivery time:						
No customer response	3	8	13	6		31
Good customer response			5	4		9
No opinion		1	1			2
Factor E: Additional Sales With 24 Hour Delivery:						
No additional sales	4	9	11	7		31
Quite a bit (10 & 25%)			2			2
Don't know			6	3		9

Source: Survey Data.

TABLE 20

SPECIES OF FRESH FISH CARRIED BY RETAILERS

Specy Name	Number of times Mentioned by Retailers Handling Fresh Fish
Perch	30
Haddock	20
Pike	12
Sole	11
Whiting	9
Oysters	9
Bass	8
Red Snapper	7
Shrimp	6
Mullet	6
Cod	6
Pickerel	5
Flounder	4
Cat	4
Trout	4
Butterfish	3
Squid	2
Clams	2
Salmon	2
Mackerel	2
Buffalo	2
Halibut	2
Hake	1
Pollock	1
Sheepshead	1
Ciscoes	1
Lobster	1
Smelt	1

Source: Survey Data

TABLE 21

METHODS OF DETERMINING SPECIES OF FRESH FISH CARRIED BY RETAILERS

Methods of Determining Species Carried Reported by Retailers	Retail Groups and Number of Responses: General Line Group 1	Group 2	Group 3	Group 4	Specialty Markets	Total
Customer preference		3	4	9	9	25
Past sales experience		1	3	4		8
Try different species for 1 month				2		2
Carry whatever supplier has			1		1	2
Take whatever chain's warehouse has				1		1
Meat manager decides				3		3
Price - must retail under $1.29 a lb.			1			1

Source: Survey Data.

TABLE 22

EFFECT ON SALES IF PARTICULAR SPECIES COULD BE ORDERED BY RETAILERS

Effect on Sales	Retail Groups and Number of Responses: General Line Group 1	Group 2	Group 3	Group 4	Specialty Markets	Total
No effect on sales		2	7	12	7	28
Favorable effect on sales		1	1	5	2	9
Uncertain		1	1	2	1	5

Source: Survey Data.

TABLE 23

RETAILERS OPINION OF SALES POTENTIAL

OF UNDER-UTILIZED SPECIES

Specy	Could you sell profitably --- Yes-- Frozen	Fresh	Canned	No*	No Opinion
Silver Hake ** (whiting)	13	11	-	16	2
Pollock	6	-	-	32	4
Northern Shrimp	5	4	-	29	4
Squid	2	11	-	28	1
Mackerel **	2	8	17	12	3
Blue Mussel	-	-	2	35	5
Sea Herring	6	2	10	20	4
Butterfish	2	7	-	29	3
Mullet	1	11	-	26	4
Tanner (Queen) Crab	3	-	3	32	4
Calico Scallops	1	6	-	32	3
Pacific Cod **	19	2	-	19	2
Catfish **	9	12	-	16	5

* Respondents either had no knowledge of the specy, or reported they would not handle it.

** 50% or more of the respondents said they could profitably sell these species if supplies were adequate.

Source: Survey Data.

XIV. PROBLEMS OF RETAILERS HANDLING FISH

(a) Handling Problems in General

The problems attributed by retailers to the handling of all forms of fish are given in Table 24. The results are remarkable in that 97 of the 110 retailers related the fact they had no problems handling fish. Further, only 10 of the 42 retailers selling fresh fish mentioned spoilage as a particular problem. Similarly, despite the fact 92 of the 110 retailers stocked some form of frozen fish, merely two retailers put forth problems associated with frozen fish, namely, freezer burn and thawing. Lastly, foreign material in canned fish was given by one retailer as a problem he had with canned fish.

(b) Handling Problems Associated With Spoilage of Fresh Fish

Moving from the problems of handling fish in general to the specific effect of spoilage on the handling of fresh fish, we have the results in Table 25. Due to the perishability of fresh fish, retailers say they order minimum quantities as needed and attempt to sell their inventory in two to three days. As a matter of fact, two retailers commented it was better to have too little than too much fresh fish on hand. Two

retailers noted that they kept fresh fish heavily iced to reduce spoilage, while a couple more retailers used lemon to kill the smell.

(c) Suggestions to Prevent Spoilage of Fresh Fish

To reduce handling problems and prevent spoilage, retailers primarily proposed fresh fish moved to the store faster for longer shelf life. Several retailers proposed wholesalers either permit smaller orders or refrigerate fresh fish better. Rinsing fresh fish after two days; freezing leftover fish; ceasing the use of cardboard and plastic that dry out fish; and stop handling fresh fish, were also suggested as means of preventing spoilage.

(d) Problems of Selling Fresh Fish Versus Meat

The data in Table 26 show 14 of the 42 retailers had no problems in selling fresh fish versus fresh meat. Four of the 14 "no problem" retailers, however, were specialty fish markets handling fish only. Aside from this group, the problems described by retailers selling both fresh fish and meat fall into two categories. The first category represents handling problems. In this category are such problems as the fact fresh fish leaks or smells and must be separated from fresh meat, especially chicken. Similarly,

fresh fish must be sold faster than meat; keeping fish iced is messy; it is more difficult than meat to display attractively; lights dry out fresh fish faster than meat; and left over meat can be sold as hamburger if necessary, whereas fresh fish can only be frozen. The second group of problems are essentially sales volume oriented. Fear of pollution and consumer ignorance of nutritional value, for example, tend to depress sales of fresh fish. Fresh fish, moreover, sells generally on Thursday or Friday, whereas meat sells every day. Lastly, the uncertain supply of of fresh fish in contrast with the availability of meat tends to reduce fresh fish sales.

TABLE 24

PROBLEMS OF HANDLING FISH

Problems	Retail Groups and Number of Responses: General Line Group 1	General Line Group 2	General Line Group 3	General Line Group 4	Specialty Markets	Total
None	29	26	15	20	7	97
Spoilage of Fresh Fish	-	-	1	4	5	10
Frozen fish freezer burn	-	-	1	-	-	1
Thawing of frozen fish	-	-	-	1	-	1
Foreign material in canned fish	-	-	1	-	-	1

Source: Survey Data

TABLE 25

EFFECT OF SPOILAGE ON THE HANDLING OF FRESH FISH AND SUGGESTIONS TO PREVENT SPOILAGE

	Number of Times Mentioned by Retailers
A. Effect of Spoilage on Handling	
Sell fresh fish in 2 or 3 days	3
Order minimum quantities as needed	9
Order less than needed; always better to have too little	2
Keep heavily iced	2
Use lemon to kill the smell	2
B. Suggestions to prevent spoilage	
Get fresh fish to store faster for longer shelf life	7
Wholesalers should permit smaller orders	2
Keep refrigerated better	2
Freeze leftover fish	2
Rinse fish after 2 days	2
Stop using cardboard and plastic which dry out fish	1
Stop handling fresh fish	1

Source: Survey Data.

TABLE 26

PROBLEMS OF SELLING FRESH FISH VERSUS FRESH MEAT

Problems	Retail Groups & Number of Responses: General Line Group 2	General Line Group 3	General Line Group 4	Specialty Markets	Total
No Problems	2	2	6	4	14
Fresh fish leaks, smells	1	2	1	-	4
Must separate from chicken especially, and meat	-	-	5	3	8
Messy ice for fish but not for meat	-	2	-	3	5
Lights dry out fish more than meat	-	-	1	1	2
Leftover meat put into hamburger, not so fish	-	-	1	1	2
Harder than meat to display attractively	-	-	1	-	1
Must sell faster than meat	-	1	4	1	6
Low sales [pollution and nutritonal ignorance]	1	1	-	1	3
Fish sells best Thursday, Friday; meat every day	-	1	1	-	2
Uncertain supply cuts sales, not so for meat	-	1	-	-	1

Source: Survey Data.

XV. SUGGESTIONS TO IMPROVE SALES OF FRESH FISH

Concluding discussion of the exploratory survey among retailers in Northern Ohio are suggestions they offered to increase the sale of fresh fish. In many respects this may be the most important contribution of the survey, since fresh fish may represent the product form of the future for the domestic fishing industry, as described heretofore. The suggestions are presented in tabular form under appropriate headings. The number of retailers suggesting each proposal is shown in brackets.

A. Advertising

1. A consumer education campaign should be launched at the national level. The campaign should convey the healthful characteristics of fish, its good qualities, its advantages over meat, and how to prepare fresh fish correctly. [N=29]

2. Federal and local authorities should cease scaring the public periodically with their pollution proclamations. [N=7]

3. There should be more advertising of fresh fish (primarily warm weather species) in winter to reduce the seasonal decline of fresh fish sales. [N=1]

4. Small retail outlets should develop means to engage in advertising effectively. [N=1]

B. Display

1. First class, separate displays should be utilized within stores to promote the sale of fresh fish. [N-10]

2. Make the instore displays of fresh

fish more appealing by showing fresh fish whole on ice, decorating it with green vegetables, and so forth. [N=4]

C. Processing

1. Develop a method of prolonging the shelf life and reduce the perishability of fresh fish. [N=5]

2. Develop a method of reducing the odor of fresh fish. [N=3]

3. Offer more prepared fresh fish and shell fish in the stores. [N=3]

4. Develop packaging which prolongs the life of fresh fish and serves as an attractive container to increase sales. [N=1]

D. Pricing

1. Adopt more efficient procedures to lower the unrealistically high price of fresh fin and shell fish. [N=29]

2. Adopt a more flexible pricing policy to get higher prices for better quality of a given specy. [N=2]

E. Other

1. Provide a more consistent supply of fresh fin and shell fish by more effectively coordinating the flow of fresh fish from the various coasts seasonally at a reasonable price. [N=9]

2. Institute a policy of compulsory grading so people will know what they buy and have assurance of stated quality. Imported products should also be required to meet domestic grade levels or be identified conspicuously as ungraded fish. [N=3]

3. Clean up pollution and stop frightening people when the effects of various mercury levels on health are not really known. [N=3]